

10/049253

JC10 Rec'd PCT/PTO 08 FEB 2002

**In the Claims:**

Please amend claims 1-5, 7-14, 16-26, 28-30, and 32-43 as follows:

1. (Amended) A communications system, comprising:  
first and second locations, wherein the second location is remote and separate  
from the first location, each of the locations comprising:  
a real time image capturing device,  
an image projecting device,  
an observation zone for occupation by a participant, and  
a two-way mirror through which images are viewed;  
the image capturing device at the first location being:
  - (a) arranged to view a participant occupying the observation zone at the  
first location directly or indirectly along a line of sight which passes through the two-way  
mirror at the first location, and
  - (b) linked to the image projecting device at the second location whereby a  
captured image is transmitted from the first location to the second location and projected  
at the second location for viewing through the two-way mirror at the second location; andthe first location comprising a visual depth cue physically located on an opposite  
side of the two-way mirror relative to the observation zone, the visual depth cue being in  
the form of one or more physical objects visible through the two-way mirror from the  
observation zone so that an image generated at the second location of a participant at the  
second location is seen through the two-way mirror at the first location in superimposed  
relation within a three-dimensional setting afforded by the visual depth cue.
2. (Amended) A system as claimed in Claim 1 in which the one or more physical  
objects are visually located at positions forwardly and/or rearwardly of a visual position  
of the image generated at the second location when the image is being projected at the  
first location, as viewed from the observation zone at the first location.

3. (Amended) A system as claimed in Claim 1 in which the setting comprises a chair, the back of the chair being visually located rearwardly of a visual position of the image generated at the second location when the image is being projected at the first location, as viewed from the observation zone at the first location.
4. (Amended) A system as claimed in Claim 1 in which the setting comprises furniture selected from a group consisting of a desk, a table, a counter, and a console visually located forwardly of a visual position of the image generated at the second location when the image is being projected at the first location, as viewed from the observation zone at the first location.
5. (Amended) A system as claimed in Claim 1 in which the setting comprises a lectern visually located forwardly of a visual position of the image generated at the second location when the image is being projected at the first location, as viewed from the observation zone at the first location.
7. (Amended) A system as claimed in Claim 6 in which a substantially full height image of a participant at the second location is projected for viewing against the stage setting at the first location.
8. (Amended) A system as claimed in Claim 7 in which the substantially full height image of the participant at the second location is visually positioned at a location intermediate of forward and rearward extremities of the stage setting.
9. (Amended) A system as claimed in Claim 6 in which the stage setting includes a background located rearwardly of a visual position of the image generated at the second location when the image is being projected at the first location, as viewed from the observation zone at the first location.

10. (Amended) A system as claimed in Claim 1, in which the setting comprises a background located rearwardly of a visual position of the image generated at the second location when the image is being projected at the first location, as viewed from the observation zone at the first location, and means being provided for producing an image  
5 on the background for viewing through the two-way mirror.
11. (Amended) A system as claimed in Claim 1, in which the image generated at the second location is projected so that, from the observation zone at the first location, it represents the remote participant at the second location as a substantially life-size image in relation to the setting.
12. (Amended) A system as claimed in Claim 1 including means for illuminating the one or more physical objects constituting the visual depth cue.
13. (Amended) A system as claimed in Claim 1, in which the image generated at the second location of a participant at the second location comprises a background which is substantially non-visible when viewed through the two-way mirror at the first location by a participant at the first location.
14. (Amended) A system as claimed in Claim 1, in which the two-way mirror is inclined relative to the line of sight of a participant stationed in the observation zone.
16. (Amended) A system as claimed in Claim 15 in which a remotely-captured image is incident on the two-way mirror from a location below the two-way mirror.
17. (Amended) A system as claimed in Claim 15 in which a remotely-captured image is incident on the two-way mirror from a location above the two-way mirror.

18. (Amended) A system as claimed in Claim 1 including means for adjusting at least one of, the image-capturing device and a participant in the observation zone, so that the eye-level of the participant is substantially aligned with the line of sight of the image-capturing device viewing the participant.

19. (Amended) A system as claimed in Claim 1, in which remotely-captured images are displayed so as to create a stereoscopic visual effect when viewed from the observation zone.

20. (Amended) A system as claimed in Claim 19 in which the remotely-captured images are processed using light polarising elements to form pairs of images having different polarisations so that a stereoscopic image of a participant is seen when viewed from the observation zone using polarised glasses, whereby the images are viewed at the observation zone using a viewer synchronised with the display of the alternating images.

21. (Amended) A system as claimed in Claim 19 in which the stereoscopic visual effect is produced by alternating between images of a participant captured from different viewpoints.

22. (Amended) A system as claimed in Claim 1, in which at least one of the locations is provided with at least two image-capturing devices for viewing the participant(s) from different angles and in which at least one of the locations is provided with at least two image-projecting devices linked to the image-capturing devices.

23. (Amended) A system as claimed in Claim 22 in which remotely-captured images from the second location are displayed so as to create a stereoscopic effect when viewed from the observation zone at the first location.

24. (Amended) A system as claimed in Claim 22 in which remotely-captured images are projected onto a retroreflective screen located at the opposite side of the two-way mirror relative to the observation zone whereby the remotely-captured images from the second location are viewed in retroreflection at the observation zone of the first location.

25. (Amended) A system as claimed in Claim 1 including means for tracking the eye position of a participant in the observation zone and means for adjusting the image-projecting device in dependence upon such tracked positioning.

26. (Amended) A system as claimed in Claim 25 in which the tracking means includes an item of headwear to be worn by the participant in use of the system.

28. (Amended) A system as claimed in Claim 1 including means for correlating actions of a participant at the second location with the one or more physical objects in the first location three dimensional setting so as to produce the impression of interaction of the image observed at the first location with the one or more physical objects.

29. (Amended) A communications system comprising:

a first location comprising:

a real time image capturing device, and

an observation zone for occupation by one or more participants, the

5 image-capturing device being arranged to view the observation zone;

a second location that is separate and remote relative to the first location, the  
second location comprising:

an image projecting device linked to the image-capturing device at the  
first location,

10 an observation zone for occupation by one or more participants at the  
second location,

a three dimensional setting with a visual depth cue in the form of one or  
more physical objects viewable from the observation zone of the second location, and

15 a two-way mirror interposed between the observation zone of the second  
location and the three dimensional setting,

the system being arranged such that an image captured at the first location is  
transmitted from the first location to the second location and is projected at the second  
location for viewing of the participant(s) at the first location through the two-way mirror  
in superimposed relation with the three dimensional setting.

30. (Amended) A system as claimed in Claim 29 in which a substantially full height  
image of the participant(s) at the first location is projected for viewing within the three  
dimensional setting of the second location.

32. (Amended) A system as claimed in Claim 29 further comprising a voice  
communication link between the first and second locations.

33. (Amended) A system as claimed in Claim 29, in which a visual person(s) to  
person(s) link between the locations is supplemented by a computer link between the  
locations.

34. (Amended) A system as claimed in Claim 29, in which, in addition to the first and second locations, there is at least one further location so arranged that a person at each of the locations is able to communicate at least visually with a person at one or more of the other locations.

35. (Amended) A viewing arrangement for use in the communications system as claimed in Claim 29, the arrangement being such that a captured image of the one or more participants at the first location is transmitted from the first location to the image projecting device of the second location and is projected for viewing at the second  
5 location through the two-way mirror in superimposed relation with the three dimensional setting at the second location.

36. (Amended) A communications system comprising:  
at least one image projecting device capable of being linked to an image-capturing device at a remote location,  
an observation zone for occupation by one or more participants,  
5 a three dimensional setting with a visual depth cue viewable from the observation zone, and  
a two-way mirror interposed between the observation zone and the three dimensional setting, the system being arranged such that remotely-captured images are projected onto a retroreflective screen located at an opposite side of the two-way mirror  
10 relative to the observation zone whereby the remotely-captured images are viewed in retroreflection at the observation zone.

37. (Amended) A communications system comprising:  
an image projecting device capable of being linked to an image-capturing device  
at a remote location,  
an observation zone for occupation by one or more participants,  
5 a three dimensional setting with a visual depth cue viewable from the observation  
zone,  
a two-way mirror interposed between the observation zone and the three  
dimensional setting,  
means for tracking an eye position of a participant in the observation zone, and  
10 means for adjusting the image-projecting device in dependence upon tracked eye  
positioning by the tracking means.

38. (Amended) A system as claimed in Claim 37 in which the tracking means  
includes an item of headwear to be worn by the tracked participant in use of the system.

39. (Amended) A system as claimed in Claim 37 in which the tracking means  
includes a camera for observing the tracked participant and means for analysing images  
captured thereby to determine eye positioning.



40. (Amended) A communications system, comprising:  
first and second locations, wherein the second location is remote and separate  
from the first location, each of the locations comprising:

a real time image capturing device,  
an image projecting device,  
an observation zone for occupation by a participant, and  
a two-way mirror through which images are viewed;

the image capturing device at the first location being:

(a) arranged to view a participant occupying the observation zone at the  
first location directly or indirectly along a line of sight which passes through the two-way  
mirror at the first location, and

(b) linked to the image projecting device at the second location whereby a  
captured image is transmitted from the first location to the second location and projected  
at the second location for viewing through the two-way mirror at the second location; and

the second location comprising a visual depth cue physically located on an  
opposite side of the two-way mirror relative to the observation zone, the visual depth cue  
being in the form of one or more physical objects visible through the two-way mirror  
from the observation zone so that an image generated at the first location of a participant  
at the first location is seen through the two-way mirror at the second location in  
superimposed relation within a three-dimensional setting afforded by the visual depth  
cue, and

the second location being arranged such that the remotely-captured images from  
the first location are projected onto a retroreflective screen located at the opposite side of  
the two-way mirror relative to the observation zone whereby the remotely-captured  
images from the first location are viewed in retroreflection at the observation zone at the  
second location.

41. (Amended) A communications system, comprising:  
first and second locations, wherein the second location is remote and separate  
from the first location, each of the locations comprising:

a real time image capturing device,  
an image projecting device,  
an observation zone for occupation by a participant, and  
a two-way mirror through which images are viewed;

the image capturing device at the first location being:

(a) arranged to view a participant occupying the observation zone at the  
first location directly or indirectly along a line of sight which passes through the two-way  
mirror at the first location, and

(b) linked to the image projecting device at the second location whereby a  
captured image is transmitted from the first location to the second location and projected  
at the second location for viewing through the two-way mirror at the second location; and

the second location comprising a visual depth cue physically located on an  
opposite side of the two-way mirror relative to the observation zone, the visual depth cue  
being in the form of one or more physical objects visible through the two-way mirror  
from the observation zone so that an image generated at the first location of a participant  
at the first location is seen through the two-way mirror at the second location in  
superimposed relation within a three-dimensional setting afforded by the visual depth  
cue, and

means being provided for tracking an eye position of a participant in the  
observation zone and means for adjusting the image-projecting device in dependence  
upon such tracked positioning.

42. (Amended) A system as claimed in Claim 41 in which the tracking means  
includes an item of headwear to be worn by the tracked participant in use of the system.

43. (Amended) A system as claimed in Claim 41 in which the tracking means includes a camera for observing the tracked participant and means for analysing the images captured thereby to determine eye positioning, the second location being arranged such that the remotely-captured images from the first location are displayed so as to
- 5 create a stereoscopic effect when viewed from the observation zone of the second location.

**Please add new claims 44-46 as follows:**

44. (New) A system as claimed in Claim 1 further comprising a voice communication link between the first and second locations.
45. (New) A system as claimed in Claim 1 further comprising a data link between the first and second locations.
46. (New) A system as claimed in Claim 1, in which, in addition to the first and second locations, there is at least one further location so arranged that a person at each of the locations is able to communicate at least visually with a person at one or more of the other locations.